

New records of Crabronidae (Hymenoptera: Apoidea) from the Maltese Islands with an updated checklist

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ABSTRACT. Eight species of Crabronidae are recorded from the Maltese Islands for the first time: *Cerceris flavilabris* (Fabricius), *Miscophus niger* Dahlbom, *Oxybelus trispinosus* (Fabricius), *Passaloecus brevilabris* Wolf, *Trypoxylon scutatum* Chevrier, *Prosopigastra creon* (Nurse), *Mimumesa unicolor* (Vander Linden) and *Nitela lucens* Gayubo & Felton. Of these, *Prosopigastra creon* is recorded from Europe for the first time. A checklist of the fifty-four species of Maltese Crabronidae is also provided.

KEY WORDS. Europe, Malta, new records, *Prosopigastra creon*.

INTRODUCTION

Records of Crabronidae from the Maltese Islands were first mentioned in the work of ALFKEN (1929), who recorded two species in his list of Hymenoptera from the archipelago. ERLANDSSON (1972) recorded three species, two of which were new for the islands, and CILIA (1975) added another two species of *Cerceris* which he collected from the inflorescences of *Drimia maritima*. The works of VALLETTA (1971, 1979) recorded a total of 11 species. SCHEMBRI (1991) reviewed the Sphecidae (*sensu lato*) of the Maltese Islands, and added 19 new records, with SCHMID-EGGER (2003) adding a further five new records. SCHMID-EGGER *et al.* (2016) added a species of *Spilomena* and provided a check-list of the known crabronid fauna of the Maltese Islands, which at that time stood at 46 species. The present work records an additional eight species as new for the Maltese Islands, and an updated checklist of the 54 species is provided in Appendix I.

MATERIAL AND METHODS

Some 150 specimens of Crabronidae collected in the Maltese Islands between the years 2014 and 2020, by means of malaise traps and net-sweeping, were identified. Specimens of *Nitela lucens* and *Prosopigastra creon* are deposited within the collection of Christian Schmid-Egger; all other specimens are deposited within the joint collection of Thomas Cassar and David Mifsud. Photographs of mounted specimens of some of the newly recorded taxa were taken using an Olympus TG-5 camera, on macro mode with focus stacking, in conjunction with a Leica M80 stereomicroscope. All species, with the exception of *Prosopigastra creon* can be identified with the keys in Faune de France (BITSCH *et al.*, 2020), from which distribution information was also taken. Identification of *Prosopigastra* was done using the work of PULAWSKI (1979).

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ANNOTATED SPECIES LIST

Subfamily Crabroninae Latreille, 1802

Miscophus niger Dahlbom, 1844

(Fig. 1)

Material examined. MALTA: Mellicha (St Maria Estate), 25.vii-25.viii.2017, 7♀♀ & 2♂♂ (malaise trap), leg. D. Mifsud; Fawwara, 22-29.v.2017; 2♀♀ (malaise trap), leg. D. Mifsud; Buskett, 1.vii-30.viii.2014, 1 ex. (malaise trap), leg. D. Mifsud.

Notes. The species is widespread and common in southern, central and eastern Europe and Turkey. It was also recorded from Sicily (SCHMID-EGGER, 2003) and therefore its presence in Malta was to be expected.

Oxybelus trispinosus (Fabricius, 1787)

(Fig. 2)

Material examined. MALTA: Mellicha (St Maria Estate), 25.vii-25.viii.2017, 1♀ (malaise trap), leg. D. Mifsud

Notes. *Oxybelus trispinosus* is widely distributed in the temperate Palaearctic area, and rare in the extreme south of Europe. Thus, Malta marks the southernmost limit of the distribution range of this species.

Prosopigastra creon (Nurse, 1903)

(Fig. 3)

Material examined. MALTA: Mellicha (St Maria Estate), 25.vii-25.viii.2017, 1♀ (malaise trap), leg. D. Mifsud.

Notes. *Prosopigastra creon* occurs in large parts of Africa, in western Asia eastwards to Turkmenistan and Pakistan, and Oman (PULAWSKI, 1979). Some sparse North African records of this species exist from Tunisia, Morocco and Egypt. This species is therefore new to the Fauna of Europe.

Trypoxylon scutatum Chevrier, 1867

(Fig. 4)

Material examined. MALTA: Mellicha (St Maria Estate), 25.vii-25.viii.2017, 2♀♀ (malaise trap), leg. D. Mifsud; Fawwara, 22-29.v.2017, 1♀ (malaise trap), leg. D. Mifsud.

Notes. The species is widespread in southern Europe and is also recorded from Sicily (SCHMID-EGGER, 2003).

Nitela lucens Gayubo & Felton, 2000

Material examined. MALTA: Dingli, 25.vi.2014, 1 ex., leg. Kafka (CSE).

Notes. *Nitela lucens* was first described in 2000 and is widely distributed in southern-central Europe and the Mediterranean area, eastwards to Turkey and southwards to Tunisia.

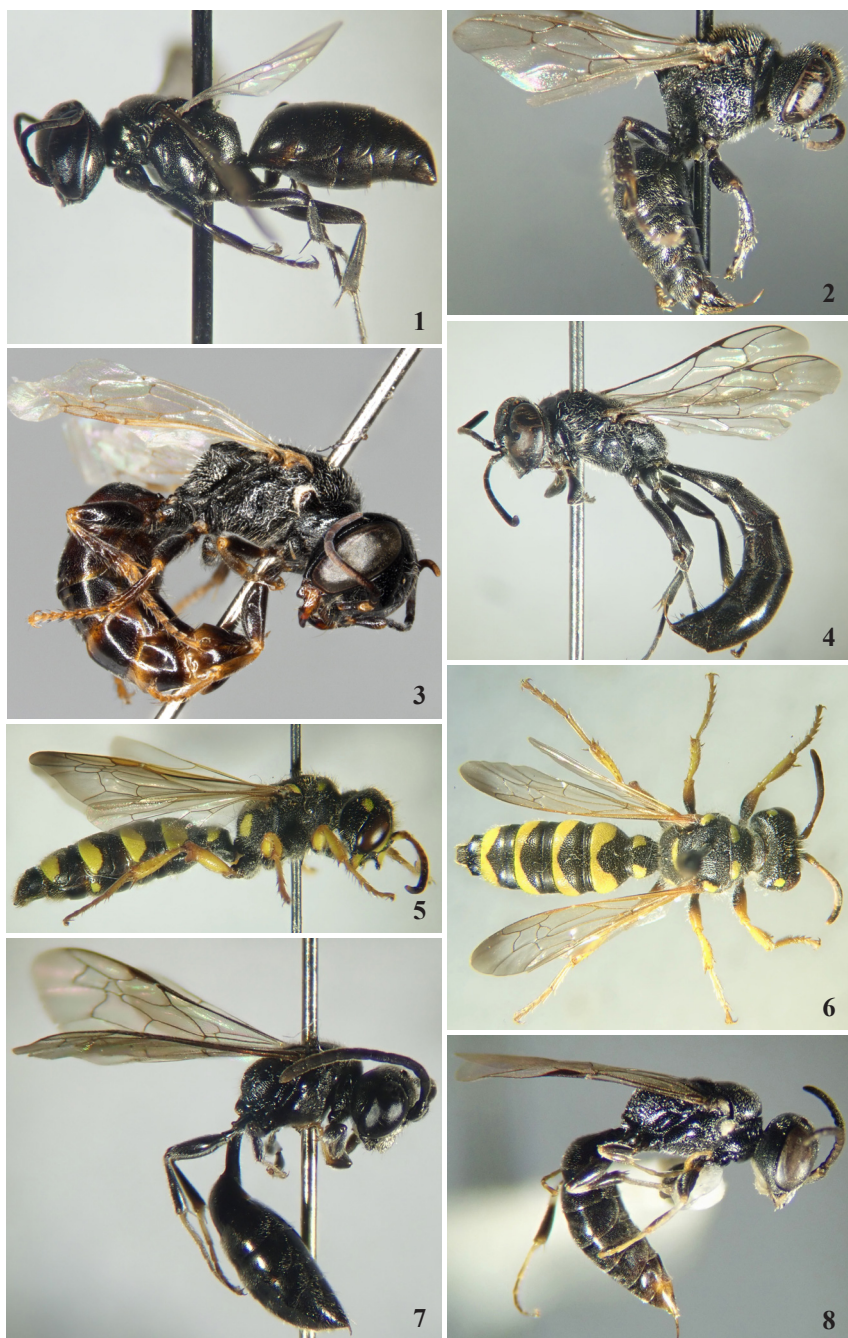


Figure 1: *Miscophus niger*; **Figure 2:** *Oxybelus trispinosus*; **Figure 3:** *Prosopigastra creon*; **Figure 4:** *Trypoxylon scutatum*; **Figure 5:** *Cerceris flavilabris*, lateral; **Figure 6:** *C. flavilabris*, dorsal. **Figure 7:** *Mimumesa unicolor*; **Figure 8:** *Passaloecus brevilabris*.

Subfamily Philanthinae Latreille, 1802

Cerceris flavilabris (Fabricius, 1793)

(Figs. 5-6)

Material examined. MALTA: Delimara (St Peter's Pool), 30.iv.2016, 2♂♂, leg. D. Mifsud; (loc?), 10.v.2018, 1♂, leg. T. Cassar; Imselliet Valley, 24.v.2020, 1♂ & 2♀♀, leg. T. Cassar; Imselliet Valley, 10.v.2020, 1♀, leg. T. Cassar.

Notes. The species is widespread in the Mediterranean area and southern-central Europe to Central Asia. It is also recorded from Sicily (SCHMID-EGGER, 2003).

Subfamily Pemphredoninae Dahlbom, 1835

Mimumesa unicolor (Vander Linden, 1829)

(Fig. 7)

Material examined. MALTA: Imselliet Valley, 19.vii.2020, 2♂♂, leg. T. Cassar; Imselliet Valley, 15.vi.2020, 1♂, leg. T. Cassar.

Notes. The species is widespread in the Mediterranean area and Europe to Central Asia.

Passaloecus brevilabris Wolf, 1958

(Fig. 8)

Material examined. MALTA: Fawwara, 1-8.v.2017, 1♂ (malaise trap), leg. D. Mifsud.

Notes. *Passaloecus brevilabris* is a species usually found in temperate and northern Europe. The southernmost published findings were from central Italy and from central Greece. Therefore, the present finding from Malta represents the southernmost distribution range of this species.

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Appendix I. Updated checklist of the Crabronidae of the Maltese Islands with species listed alphabetically within their respective subfamilies.

Astatinae Lepeletier de Saint Fargeau, 1845

Astata boops (Schrank 1781)

Astata costae A. Costa 1867

Astata sicala Kohl, 1884

Bembicinae Latreille, 1802

Ammatomus coarctatus (Spinola, 1808)

Bembecinus tridens (Fabricius 1781)

Bembix oculata Panzer, 1801

Stizus pubescens Klug, 1835

Stizus ruficornis (Forster, 1771)

Subfamily Crabroninae Latreille, 1802

Belomicrus italicus A. Costa 1871

Crossocerus elongatulus trinacrius de Beaumont, 1959

Ectemnius confinis (Walker, 1871)

Ectemnius continuus sulphureipes F. Smith, 1856

Ectemnius hypsae (De Stefani, 1894)

Ectemnius sexcinctus (Fabricius, 1775)

Larra anathema (Rossi, 1790)

Lestica clypeata (Schreber, 1759)

Liris agilis (Smith, 1856)

Liris festinans praetermissus (Richards, 1928)

Liris niger (Fabricius, 1775)

Miscophus bicolor Jurine, 1807

Miscophus helveticus Kohl, 1883

Miscophus niger Dahlbom, 1844

Nitela lucens Gayubo & Felton, 2000

Oxybelus dissectus Dahlbom, 1845

Oxybelus trispinosus (Fabricius, 1787)

Pison atrum (Spinola, 1808)

Prosopigastra creon (Nurse, 1903)

Solierella compedita (Piccioli, 1969)

Tachysphex costae De Stefani, 1882

Tachysphex fugax (Radoszkowski, 1877)

Tachysphex nitidior Beaumont, 1940

Tachysphex nitidus (Spinola, 1805)

Tachysphex panzeri (Vander Linden, 1829)

Tachysphex unicolor (Panzer, 1806)

Tracheliodes quinquenotatus (Jurine, 1807)

Trypoxylon attenuatum Smith, 1851

Trypoxylon kolazyi Kohl, 1893

Trypoxylon scutatum Chevrier, 1867

Subfamily Pemphredoninae Dahlbom, 1835

- Diodontus minutus* (Fabricius, 1793)
- Mimumesa unicolor* (Vander Linden, 1829)
- Passaloecus brevilabris* Wolf, 1958
- Passaloecus pictus* Ribaut, 1952
- Pemphredon lethifer* (Shuckard, 1837)
- Psenulus pallipes* (Panzer, 1798)
- Spilomena mocsaryi* Kohl, 1928
- Spilomena troglodytes* (Vander Linden, 1829)

Subfamily Philanthinae Latreille, 1802

- Cerceris arenaria* (Linnaeus, 1758)
- Cerceris flavilabris* (Fabricius, 1793)
- Cerceris lunata funerea* A. Costa 1869
- Cerceris media* Klug, 1835
- Cerceris quadricincta* (Panzer, 1799)
- Cerceris sabulosa* (Panzer, 1799)
- Philanthus coarctatus sículus* Giordani Soika, 1944
- Philanthus triangulum* (Fabricius 1775)